

CLAIMS

1. (Currently Amended) A computer-implemented method, comprising:

receiving, by a computing device, an indication of a change to data comprising a reference attribute in a first external object in a first namespace, wherein the reference attribute refers to a second external object in the first namespace, the first external object and the second external object each having an associated central representation in a second namespace, wherein the second namespace includes a metadirectory that includes all data from each of its associated namespaces;

evaluating, by the computing device, an association between the central representation of the second external object in the second namespace and the second external object in the first namespace to identify a third external object in a third namespace;

discovering, by the computing device, a format of a corresponding reference attribute in the third external object, the reference attribute and corresponding reference attribute having different formats and the format of the corresponding reference attribute being associated with an attribute in the central representation of the second external object; and

propagating, by the computing device, the changed data to the third namespace to update the third external object, the propagating including retrieving a value of the attribute in the central representation of the second object and updating a value of the corresponding reference attribute in the third external object based on the retrieved value.

2. **(Previously Presented)** The method recited in claim 1, wherein the indication of the change comprises a notice that the reference to the second external object was added, modified, or deleted.

3. **(Previously Presented)** The method recited in claim 1, wherein identifying the central representation of the first external object in the second namespace comprises evaluating correlation information that correlates objects in the first namespace with objects in the second namespace.

4. **(Previously Presented)** The method recited in claim 3, wherein the correlation information comprises a persistent data store that associates central representations in the second namespace with external objects in other namespaces.

5. **(Previously Presented)** The method recited in claim 4, wherein the association comprises a link between a unique identifier for each central representation in the second namespace and unique identifiers for each external object.

6. **(Original)** The method recited in claim 5, wherein the unique identifier comprises a globally unique identifier.

7. **(Original)** The method recited in claim 4, wherein the persistent data store comprises a table.

8. (Canceled)

9. (Original) The method recited in claim 1, wherein each object comprises an entity.

10. (Original) The method recited in claim 9, wherein each entity comprises a unique identifier that is immutable and a name.

11. (Original) The method recited in claim 10, wherein the name is mutable.

12. (Canceled)

13. (Currently Amended) A computer-implemented method, comprising:
receiving, by a computing device, an indication of a reference change from a first object in a first namespace, the reference change comprising an addition, modification, or deletion to a value of a reference attribute of the first object, wherein the value of the reference attribute is the name of a second object in the first namespace;

correlating, by the computing device, the first object to a central representation of the first object, the correlating including identifying a link between an immutable characteristic of the first object and the central representation;

identifying, by the computing device, another central representation corresponding to the second object;

identifying, by the computing device, a third object in a second namespace, the third object being associated with the central representation and depending on the data of the central representation, wherein the central representation comprises an aggregation of all information from the first object and the third object, wherein the first object serves as a first master for at least a first piece of information absent in the third object, and the third object serves as a second master for at least a second piece of information absent in the first object;

discovering, by the computing device, a format of a corresponding reference attribute in the third object, the reference attribute and corresponding reference attribute having different formats and the format of the corresponding reference attribute being associated with an attribute in the other central representation corresponding to the second object; and

propagating, by the computing device, the data to the third object to update the third object, the propagating including retrieving a value of the attribute in the other central representation corresponding to the second object and updating a value of the corresponding reference attribute in the third object based on the retrieved value,

wherein the format of the reference attribute requires a name of a person represented by the second object and the format of the corresponding reference attribute requires an email alias of the person represented by the second object.

14. (Canceled)

15. (Previously Presented) The method recited in claim 13, wherein the third object has an immutable characteristic.

16. (Original) The method recited in claim 15, wherein the immutable characteristic comprises a globally unique identifier.

17. (Canceled)

18. (Currently Amended) The method recited in claim 15, wherein identifying the third object in the second namespace comprises identifying a second link between [[an]] the immutable characteristic of the third object and the other central representation.

19. (Canceled)

20. (Original) The method recited in claim 13, wherein the central representation and the other central representation reside in a metadirectory.

21-25. (Canceled)

26. (Currently Amended) A system comprising:

a processor; and

a plurality of programming instructions to be executed by the processor to:

receive an indication of a change to data comprising a reference attribute in a first external object in a first namespace, wherein the reference attribute refers to a second external object in the first namespace, the first external object and the second external object each having an associated central representation in a second namespace, wherein the second namespace includes a metadirectory that includes all data from each of its associated namespaces;

evaluate an association between the central representation of the second external object in the second namespace and the external second object in the first namespace to identify a third external object in a third namespace;

discover a format of a corresponding reference attribute in the third external object, the reference attribute and corresponding reference attribute having different formats and the format of the corresponding reference attribute being associated with an attribute in the central representation of the second external object; and

propagate the changed data to the third namespace to update the third external object, the propagating including retrieving a value of the attribute in the central representation of the second object and updating a value of the corresponding reference attribute in the third external object based on the retrieved value.

27. (Currently Amended) The system of claim 26, wherein the instructions are further to be executed by the processor to evaluate ~~[[the]]~~ a correlation between the central representation of the first external object and the first external object by identifying a link between an immutable characteristic of the first external object and an immutable characteristic of the central representation of the first external object.

28. (Currently Amended) The system of claim 27, wherein instructions are further to be executed by the processor to identify the third external object in the third namespace by identifying a link between ~~[[an]]~~ the immutable characteristic of central representation of the first external object and an immutable characteristic of the third external object.

29. (Previously Presented) The system of claim 28, wherein the immutable characteristics comprise globally unique identifiers.

30-33. (Canceled)

34. (New) The method recited in claim 1, wherein the first namespace serves as a first master for at least a first piece of information absent in the third namespace, and the third namespace serves as a second master for at least a second piece of information absent in the first namespace.

35. (New) The system of claim 26, wherein the first namespace serves as a first master for at least a first piece of information absent in the third namespace, and the third namespace serves as a second master for at least a second piece of information absent in the first namespace.